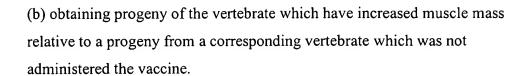
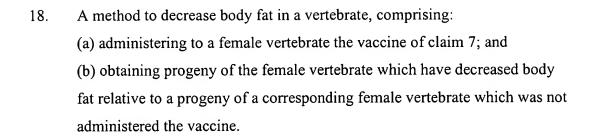
WHAT IS CLAIMED IS:

A myostatin immunoconjugate comprising a full length myostatin polypeptide linked to a carrier.

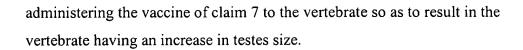
- 2. The immunoconjugate of claim 1 which comprises an avian myostatin-polypeptide.
- 3. The immunoconjugate of claim 2 which comprises a turkey myostatin polypeptide comprising SEQ ID NO:2.
- 4. The immunoconjugate of claim 1 which comprises a vertebrate myostatin polypeptide.
- 5. The immunoconjugate of claim 1 wherein the carrier is keyhole limpet hemocyanin.
- 6. The immunoconjugate of claim 1 which comprises a fusion polypeptide.
- 7. A vaccine or immunogenic composition comprising the immunoconjugate of claim 1.
- 8. The vaccine or immunogenic composition of claim 7 which comprises a pharmaceutically acceptable excipient.
- 9. A method for increasing muscle mass in progeny of an egg-laying vertebrate comprising:
 - (a) administering to the egg-laying vertebrate or to an egg of the vertebrate the vaccine of claim 7; and



- 10. The method of claim 9 wherein the vertebrate is an avian.
- 11. The method of claim 10 wherein the avian is a turkey.
- 12. The method of claim 9 wherein the muscle mass in progeny from the vaccinated vertebrate is increased by 5%.
- 13. The method of claim 9 wherein progeny from the vaccinated vertebrate have an increase in body weight, a reduction in body fat content, an increase in testis size, or any combination thereof
- 14. The method of claim 9 wherein the progeny have an increase in breast or thigh muscle weight.
- 15. The method of claim 9 wherein the vaccine comprises a myostatin polypeptide linked to a carrier.
- 16. The method of claim 15 wherein the vaccine comprises a myostatin polypeptide linked to keyhole limpet hemocyanin.
- 17. A method to passively immunize progeny of a female vertebrate, comprising:
 - (a) administering the vaccine of claim 7 to the vertebrate prior to, during or after fertilization, or any combination thereof, of at least one egg of the vertebrate; and
 - (b) obtaining progeny from the fertilized egg which comprise anti-myostatin antibodies.



- 19. The method of claim 17 or 18 wherein the vertebrate is a livestock animal.
- 20. The method of claim 17 or 18 wherein the vertebrate is an egg-laying vertebrate.
- 21. The method of claim 17 wherein the progeny exhibit an increase in body weight, an increase in muscle mass, a reduction in body fat content, an increase in testis size, or any combination thereof.
- 22. The method of claim 17 or 18 wherein the vertebrate is a turkey or chicken.
- 23. The method of claim 17 or 18 wherein the vertebrate is a pig.
- 24. The method of claim 18 wherein the progeny exhibit an increase in body weight, an increase in muscle mass, an increase in testis size, or any combination thereof.
- A method to increase testes size in a vertebrate, comprising:
 (a) administering to a female vertebrate the vaccine of claim 7; and
 (b) obtaining male progeny of the female vertebrate which have an increase in testes size relative to a male progeny of a corresponding female vertebrate which was not administered the vaccine.
- 26. A method to increase testes size in a vertebrate, comprising:



- 27. The method of claim 25 or 26 wherein the vertebrate is a turkey or chicken.
- 28. The method of claim 25 or 26 wherein the vertebrate is a pig.